

Work Order ID 51858

September 4, 2009 2:30:14 PM

SHIP 09-10/09 please



Page 1

Item ID: D3294-1

BK

Accept



Setup Start



Revision ID: C

Stop



Item Name: Bracket

Start Date: 9/07/09

Start Qty: 12.00



Cust Item ID:

Required Date: 9/09/09

Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3294

Rev C

100

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D32947-3F

Dwg Rev: A

Prog Rev: A

*grain direction on a 45 deg as per dwg**

2-Deburr if necessary

IB 9-9-8

14

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

AB 9-9-8

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Page 2

Item ID: D3294-1

Revision ID: C

Item Name: Bracket

Start Date: 9/07/09

Start Qty: 12.00

Required Date: 9/09/09

Req'd Qty: 12.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00

2) 802/09/09

0.00

14

φ

QC

Memo

Quality Control

130

Memo

0.00

80 09/09/0 8

0.00

14

φ

Brake NC

Brake NC

1-Deburr if necessary
2-Bend as per Dwg D3294
(Ensure angle is correct)

140

QC5- Inspect part completeness to step on W/O

0.00

2) 802/09/09

0.00

14

φ

QC

Memo

Quality Control

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Page 3

Item ID: D3294-1

Accept

Revision ID: C

Item Name: Bracket

Start Date: 9/07/09

Start Qty: 12.00

Required Date: 9/09/09

Req'd Qty: 12.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

Chemical Conversion Coat per QS1005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

BK 09-09-9

(14)

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Ep 09/09/09 (14)

170

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

1-Install D3294-5 doubler to D3294-3 bracket with rivets as per dwg. D3294

Ep 09/09/09 (14)

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Page 4

Item ID: D3294-1

Accept

Revision ID: C

Item Name: Bracket

Setup Start

Stop

Start Date: 9/07/09

Start Qty: 12.00

Required Date: 9/09/09

Req'd Qty: 12.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8/8/09/09

X14

9

190



Powdercoat

Powder Coating

Black Sandtex(Ref:4.3.5.7) per QS1005 4.3

Memo

Start Time: 7:30 AM
Oven Temperature: 320°F
Finish Time: 8:00 AM

0.00

0.00

del 09/09/10

X14

9

200



QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

3R 09-09-10

14

Work Order ID 51858

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Page 5

Item ID: D3294-1

Accept

Revision ID: C

Item Name: Bracket

Start Date: 9/07/09

Start Qty: 12.00

Required Date: 9/09/09

Req'd Qty: 12.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210

Identify as per dwg & Stock Location: 212

0.00



Packaging

Memo

0.00

Packaging

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

PC9/9/11 (14)

09/09/14

u.g.g.11

Picklist Print

September 4, 2009 2:30:13 PM

Page 1
2

Work Order ID: 51858

Parent Item: D3294-1RevC

Parent Item Name: Bracket


Comments:

Start Date: 9/07/09

Required Date: 9/09/09

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M2024T3S.080		Purchased	No			100	sf	207.3820	22.7368			
												
											AB 9-9-8	
2024-T3 .080 sheet												

Warehouse Loc Qty Loc Code
Location

Main Warehouse

MAT

207.38205

104921

3

105411

17

107460

4.36

110908

29.52205

112331

144

15628

6

17695

1.5

18481

2

112331

D3294-5RevC

Manufactured

No

170

Each

34.0000

12.0000



Doubler



9/9/09/09

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST

34

47418

20

50694

14

14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 2

September 4, 2009 2:30:13 PM

Work Order ID: 51858

Parent Item: D3294-1RevC

Parent Item Name: Bracket

Comments:

Start Date: 9/07/09

Required Date: 9/09/09

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS20470AD4-5		Purchased	No.			170	Each	3,661.000	180.0000			



Rivet, Universal Head



9/09/09

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

3661

109031

661"

111916

3000

HD

210

September 4, 2009 2:30:13 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	S1858
Description: BRACKET		Part Number:	D3294-1
Inspection Dwg: D3294-3 Rev: C		Page 1 of 1	

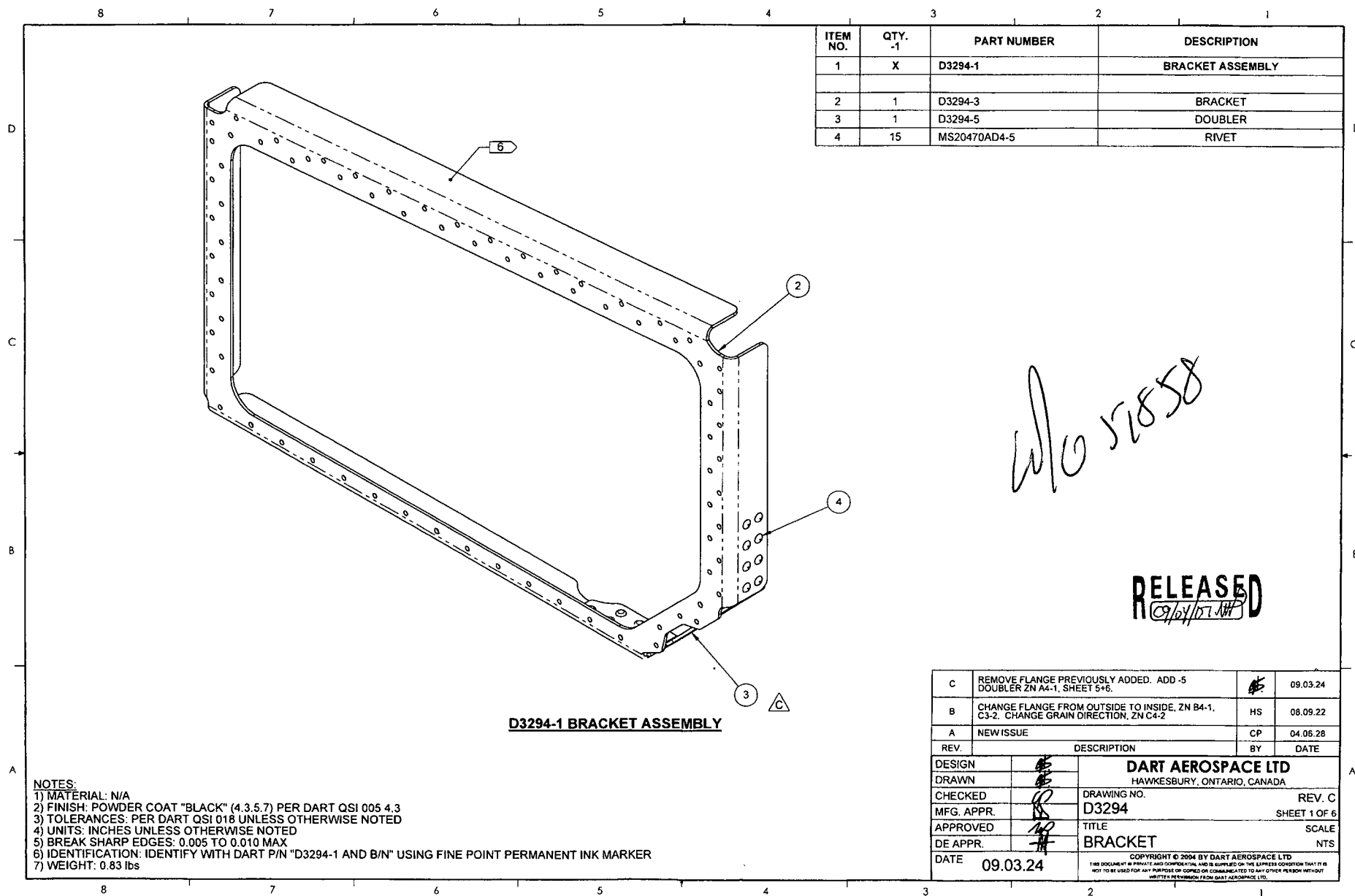
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .129	+ .005 - .001	.131	X			
Ø .141	+ .005 - .001	.143	X			
6.708	± .010	6.706	X			
1.118	± .010	1.117	X			
5.590	± .010	5.588	X			
1.118	± .010	1.117	X			
13.563	± .010	13.563	X			
1.043	± .010	1.043	X			
.625	± .010	.625	X			
.325	± .010	.327	X			
.300	± .010	.300	X			
.400	± .010	.401	X			
6.000	± .010	5.994	X			
1.000	± .010	1.000	X			
17.124	± .010	17.125	X			
16.13	± .030	16.125	X			
7.27	± .030	7.273	X			
11.97	± .030	11.967	X			
8.37	± .030	8.368	X			
20.05	± .030	20.05	X			
12.98	± .030	12.98	X			
14.59	± .030	14.59	X			
11.66	± .030	11.665	X			
.080	± .010	.080	X			

Measured by: HB	Audited by: S	Prototype Approval:	N/A
Date: 9-9-8	Date: 09/09/08	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



ITEM NO.	QTY. -1	PART NUMBER	DESCRIPTION
1	X	D3294-1	BRACKET ASSEMBLY
2	1	D3294-3	BRACKET
3	1	D3294-5	DOUBLER
4	15	MS20470AD4-5	RIVET

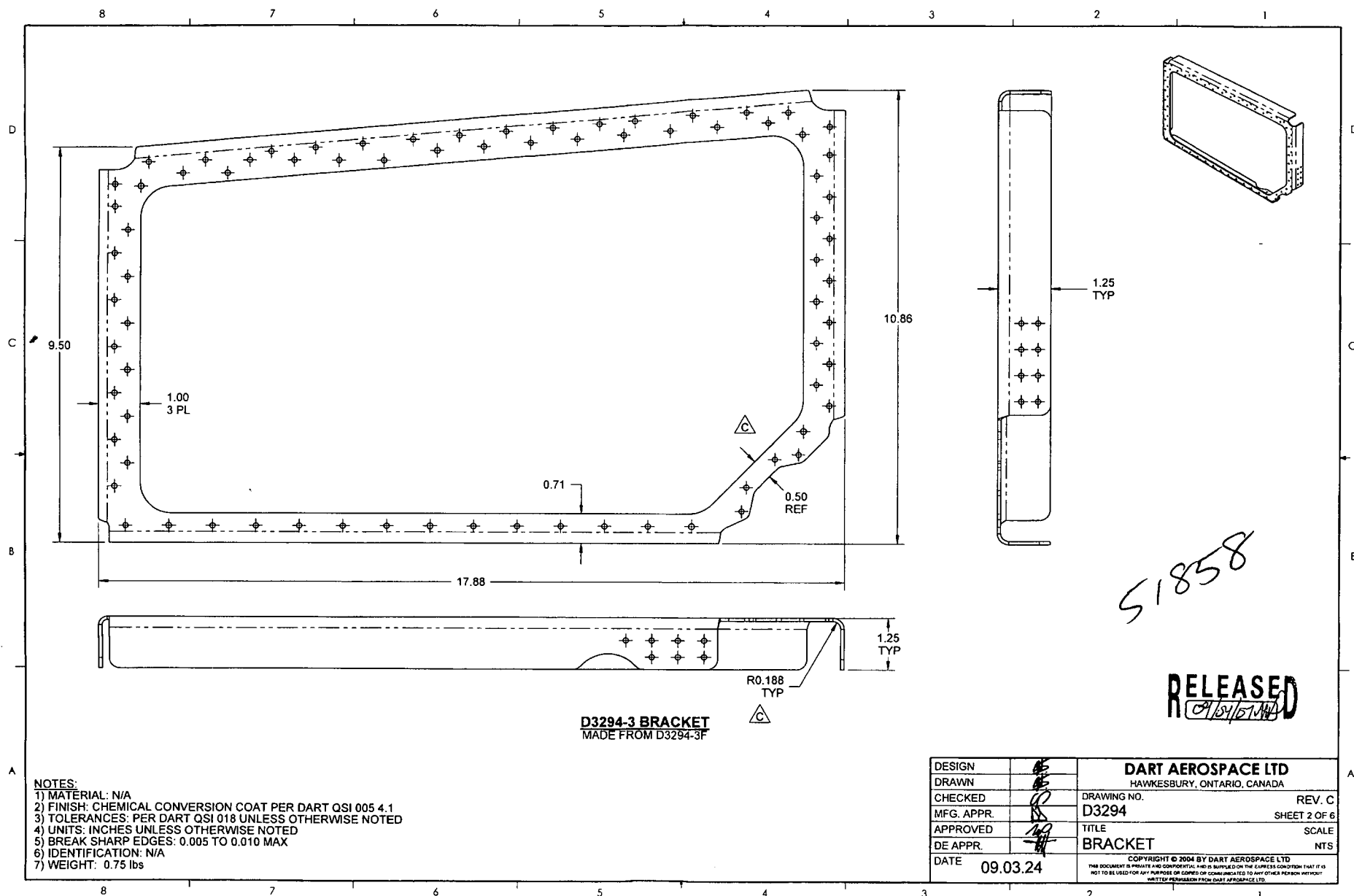
D3294-1 BRACKET ASSEMBLY

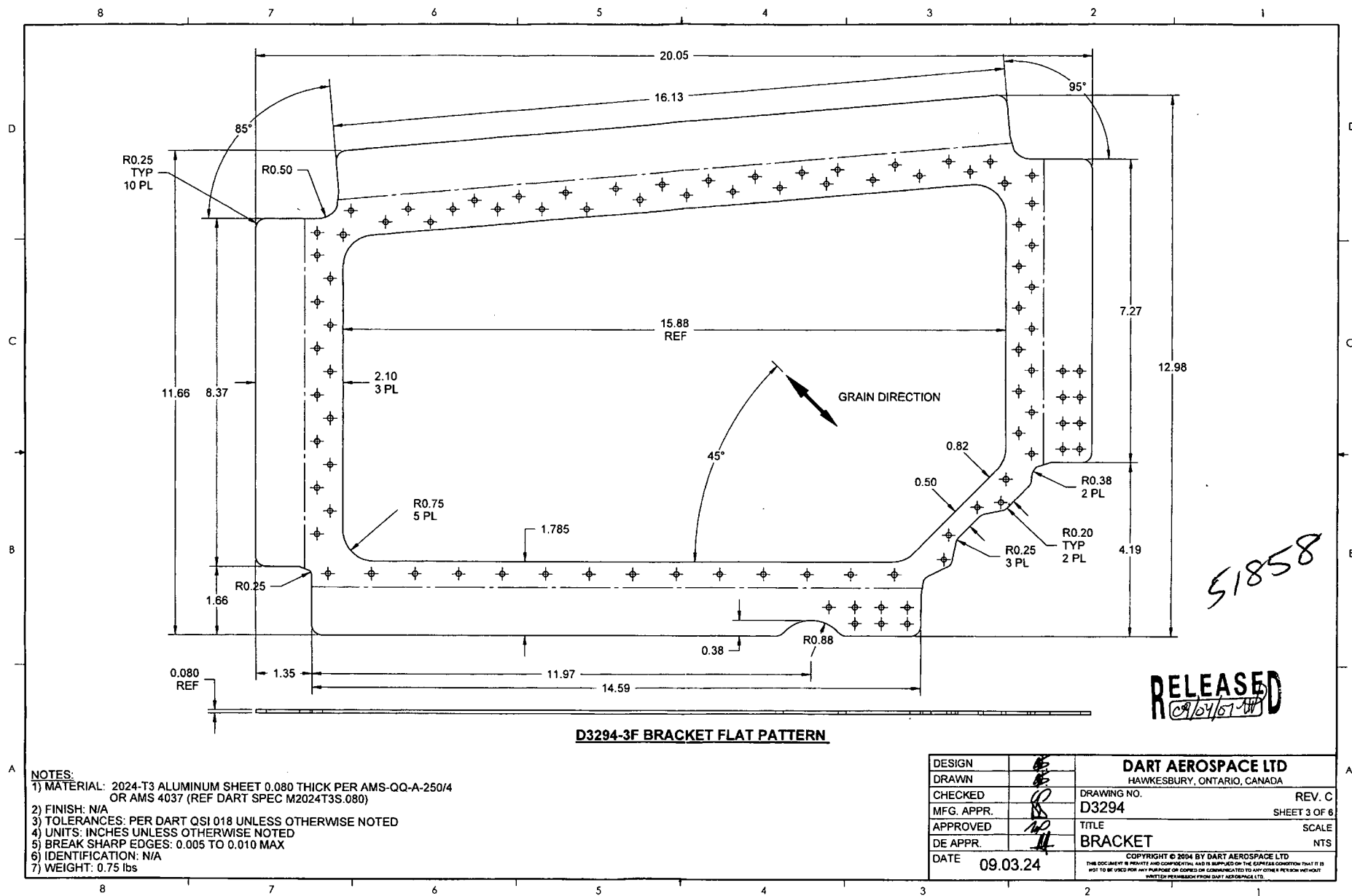
W/O 51858

RELEASED
09/04/07 JHP

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT "BLACK" (4.3.5.7) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3294-1 AND B/N" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.83 lbs

REV.	DESCRIPTION	BY	DATE
C	REMOVE FLANGE PREVIOUSLY ADDED. ADD -5 DOUBLER ZN A4-1, SHEET 5+6.	JHP	09.03.24
B	CHANGE FLANGE FROM OUTSIDE TO INSIDE, ZN B4-1, C3-2. CHANGE GRAIN DIRECTION, ZN C4-2	HS	08.09.22
A	NEW ISSUE	CP	04.06.28
DESIGN	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	D3294		
CHECKED	REV. C		
MFG. APPR.	SHEET 1 OF 6		
APPROVED	TITLE		
DE APPR.	SCALE		
DATE	09.03.24		
BRACKET			
NTS			
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- NOTES:
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.080 THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.080)
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.75 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3294	REV. C
MFG. APPR.		SHEET 3 OF 8	
APPROVED		TITLE	SCALE
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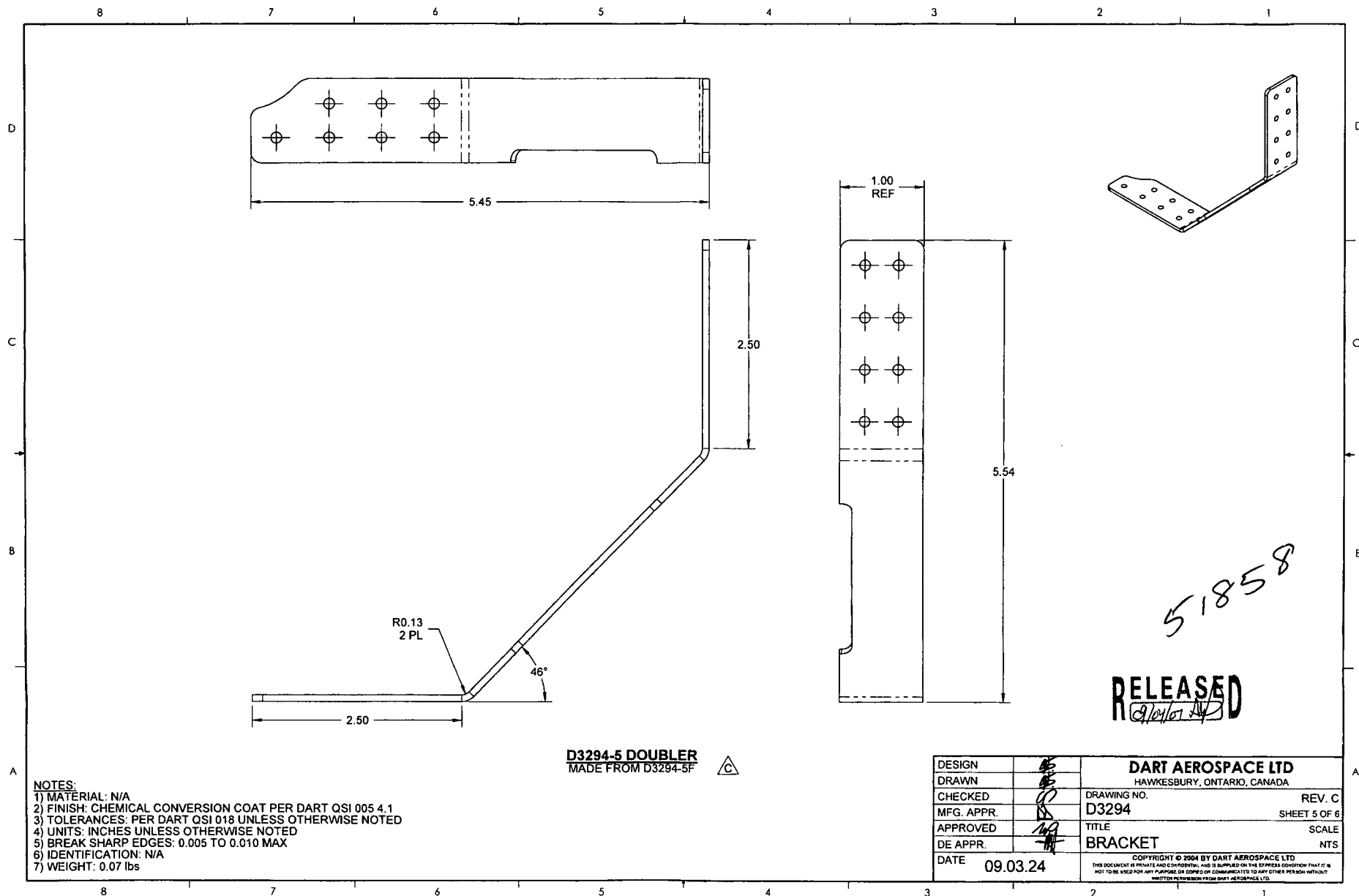
RELEASED
09/04/07

LABEL	HOLE Ø
ALL HOLES UNLESS NOTED	0.1285 (#30 DRILL)
A	0.141

D3294-3F BRACKET FLAT PATTERN
SUPPLEMENTAL

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3294	SHEET 4 OF 6
APPROVED		TITLE	SCALE
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51858
RELEASED
07/04/07



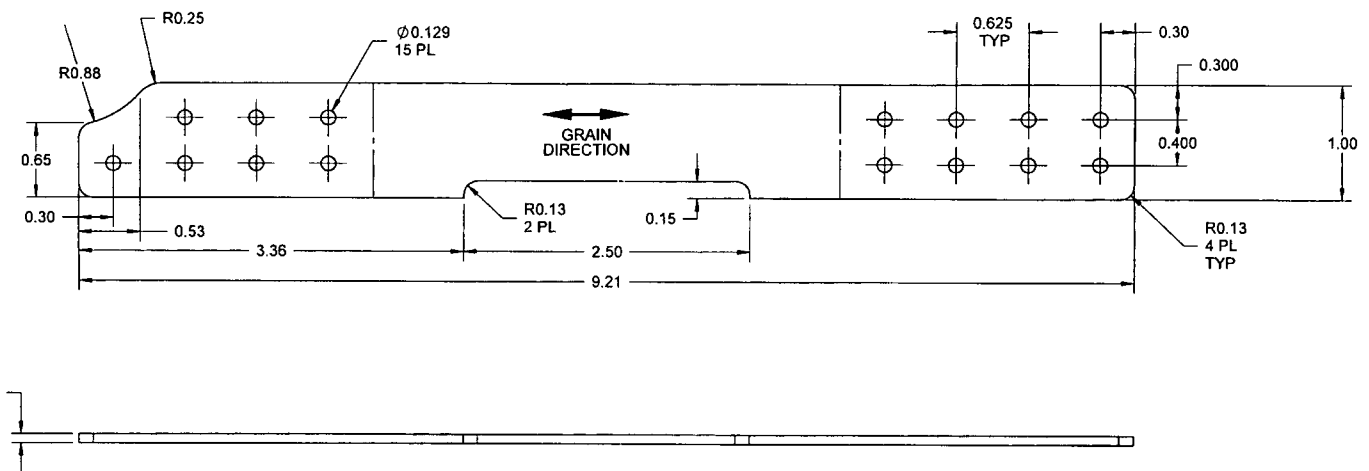
8 7 6 5 4 3 2 1

D

C

B







A



D3294-5F DOUBLER FLAT PATTERN

51858
RELEASED
9/04/07

- NOTES:**
 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.080 THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.080)
 2) FINISH: N/A
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: N/A
 7) WEIGHT: 0.07 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3294	SHEET 6 OF 6
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8 7 6 5 4 3 2 1